

U.S.S.N. 10/791,607

Claim Amendments

Please amend claims 26 and 28 as follows:

Please add new claim 42 as follows:

U.S.S.N. 10/791,607

Listing of Claims

Claims 1-25 (canceled)

26. (currently amended) A phase change memory structure comprising:

a substrate comprising a conductive area;

a spacer comprising a phase changing material sensitive to temperature and having a partially exposed sidewall region at the spacer upper portion defining a contact area, said contact area and said spacer sidewall comprising an upward sloping positive radius of curvature;

an upper conductive electrode on said contact area;

wherein a spacer bottom portion partially overlaps the conductive area and said upper conductive electrode at least partially overlaps said contact area.

27. (original) The phase change memory structure of claim 26,

U.S.S.N. 10/791,607

wherein the upper conductive electrode comprises a material selected from the group consisting of W, TiN, TiW, TiAl, TiAlN, and combinations thereof.

28. (currently amended) A phase change memory structure comprising:

a substrate comprising a conductive area;

a spacer having a partially exposed sidewall region at the spacer upper portion defining a contact area having an upward sloping positive radius of curvature, said contact area spacer sidewall comprising [[an]] said upward sloping positive radius of curvature extending along the full height of said spacer;

an upper conductive electrode at least partially overlapping[[s]] said contact area;

wherein the spacer comprises a phase changing material sensitive to temperature[[;]], said spacer further comprising[[es]] a memory element[[,]]; and,

wherein a spacer bottom portion at least partially overlaps

U.S.S.N. 10/791,607

the conductive area.

Claims 29-30 (canceled)

31. (previously presented) The phase change memory structure of claim 28, wherein the phase changing material comprises a chalcogenide.

32. (original) The phase change memory structure of claim 31, wherein the chalcogenide comprises a material selected from the group consisting of Ge, Te, and Sb and their alloy system.

33. (previously presented) The phase change memory structure of claim 26, wherein the upper conductive electrode comprises a material selected from the group consisting of W, TiN, TiW, TiAl, TiAlN, and combinations thereof.

Claims 34-41 (canceled)

42. (new) The phase change memory structure of claim 26, wherein said positive radius of curvature extends along a full height of said spacer sidewall.